

1 ABSTRACT OF THE DISCLOSURE

2 Methods of forming base plates for field emission display (FED)
3 devices, methods of forming field emission display (FED) devices, and
4 resultant FED base plate and device constructions are described. In
5 one embodiment, a substrate is provided and is configurable into a base
6 plate for a field emission display. A plurality of discrete, segmented
7 regions of field emitter tips are formed by at least removing portions
8 of the substrate. The regions are electrically isolated into separately-
9 addressable regions. In another embodiment, a plurality of field
10 emitters are formed from material of the substrate and arranged into
11 more than one demarcated, independently-addressable region of emitters.
12 Address circuitry is provided and is operably coupled with the field
13 emitters and configured to independently address individual regions of
14 the emitters. In yet another embodiment, a monolithic addressable
15 matrix of rows and columns of field emitters is provided and has a
16 perimetral edge defining length and width dimensions of the matrix.
17 The matrix is partitioned into a plurality of discretely-addressable sub-
18 matrices of field emitters. Row and column address lines are provided
19 and are operably coupled with the matrix and collectively configured to
20 address the field emitters. At least one of the row or column address
21 lines has a length within the matrix which is sufficient to address less
22 than all of the field emitters which lie in the direction along which the
23 address line extends within the matrix.

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